#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-014604 Address: 333 Burma Road **Date Inspected:** 28-May-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** You Oi Guo **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component: Tower Components** 

**Summary of Items Observed:** 

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

#### BAY#10

This QA Inspector observed the following work in progress

Flux cored Arc Welding (FCAW):

Weld joint #72 located on Shear Plate WD1 – A28A/B. Welder is identified as 057258. ZPMC Quality Control (QC) Inspector is identified as You Qi Guo. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2331 - Tc - P4 - F. (See attached photo)

Weld joint # 61 located on Shear Plate WD1 – A28A/B. Welder is identified as 057244. ZPMC Quality Control (QC) Inspector is identified as You Qi Guo. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2331 - Tc - P4 - F.

Weld joint # 60 located on Shear Plate WD1 – A28A/B. Welder is identified as 057266. ZPMC Quality Control (QC) Inspector is identified as You Qi Guo. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2331 - Tc - P4 - F.

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#### BAY#11

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 005849

Ultrasonic Testing (UT)

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member is identified as Tower Component. The weld designations reviewed are as follows:

#### LIFT – 4, WEST TOWER A/E CORNER BACKFILL PLATE

WSTL4 - 2C/L - 47

WSTL4 - 2F/L - 44

WSTL4 - 2G/L - 44

WSTL4 - 2H/L - 68

WSTL4 - 2I/L - 70

WSTL4 - 2J/L - 70

WSTL4 - 2K/L - 45

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint #43 located on Tower Strut ND1 – STSA4 – 6 – 143M – 2. Welder is identified as 040690. ZPMC Quality Control (QC) Inspector is identified as Mao Bin Bin. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2113.

Weld joint # 26 located on Tower Strut ED1 – STSA4 – 6 – 135M – 1. Welder is identified as 040610. ZPMC Quality Control (QC) Inspector is identified as Mao Bin Bin. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2112.

Weld joint #31 located on Tower Strut ND1 – STSA4 – 10 – 119M – 2. Welder is identified as 046704. ZPMC Quality Control (QC) Inspector is identified as Mao Bin Bin. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2113. (See attached photo)

#### **BLASTING SHOP#1**

This QA inspector performed Pre blast visual inspection of external surfaces of East tower, Lift 1 from 0 to 9M Elevation. Few areas were identified and marked which requires grinding, Magnetic particle testing (MT) & weld repair wherever applicable in all the Skins.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

# WELDING INSPECTION REPORT

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# **Summary of Conversations:**

No Relevant Conversations.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest - 15000422360, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer